

ABSTRACT OF THE DISCLOSURE

A set of oligonucleotide probes and method are disclosed for detecting a plurality of different target polynucleotides. The set includes a collection of different promiscuous probes each of which is capable of hybridising to a target sequence shared between at least two of the target polynucleotides. At least one target polynucleotide comprises at least one target sequence that is shared with one or more other target polynucleotides. A predefined combination of promiscuous probes is capable of hybridising to target sequences of said at least one target polynucleotide, wherein said predefined combination of probes provides specificity of detection of that target polynucleotide. Also disclosed are processes of identifying a set of target sequences for designing the set of oligonucleotide probes of the invention.